

**UNITED STATES DISTRICT COURT
DISTRICT OF MINNESOTA**

BOMBARDIER RECREATIONAL
PRODUCTS INC. and BRP U.S. INC.,

Civil No. 12-2706 (JRT/LIB)

Plaintiffs/Counter Defendants,

v.

**MEMORANDUM OPINION
AND ORDER ON MOTIONS TO
EXCLUDE**

ARCTIC CAT INC. and ARCTIC CAT
SALES INC.,

Defendants/Counter Claimants.

Harry C. Marcus and Robert K. Goethals, **LOCKE LORD LLP**, Three World Financial Center, New York, NY 10281, and Kevin D. Conneely, **STINSON LEONARD STREET LLP**, 150 South Fifth Street, Suite 2300, Minneapolis, MN 55402, for plaintiffs.

Annamarie A. Daley, **JONES DAY**, 90 South Seventh Street, Suite 5090, Minneapolis, MN 55402, and Niall A. MacLeod, **KUTAK ROCK LLP**, 60 South Sixth Street, Suite 3400, Minneapolis, MN 55402, for defendants.

Plaintiffs Bombardier Recreational Products Inc. and BRP U.S. Inc. (collectively, “Bombardier”) brought this patent infringement lawsuit against Defendants Arctic Cat Inc. and Arctic Cat Sales Inc. (collectively, “Arctic Cat”) alleging that many of Arctic Cat’s snowmobiles infringe three Bombardier patents relating to frames and seating positions of snowmobiles. Both parties have moved to exclude portions of each other’s expert reports. The Court will deny Arctic Cat’s motions to exclude and grant in part and deny in part Bombardier’s motion to exclude.

BACKGROUND

As discussed more fully in the Court's separate order addressing the parties' cross-motions for partial summary judgment, Bombardier alleges infringement of three of its patents: U.S. Patent No. 7,213,669 ("the '669 patent"), U.S. Patent Nos. 7,124,847 ("the '847 patent") and 7,214,848 ("the '848 patent"). These patents cover frames and seating positions of snowmobiles.

On September 28, 2015, the Court issued a claim construction order, construing ten patent claim terms. (Mem. of Law & Order ("Claim Construction Order"), Sept. 28, 2015, Docket No. 552.) As is relevant to the current motions to exclude, the claim construction order found as follows: The "frame" refers to "the structural core of the snowmobile that holds, carries, or supports other components." (*Id.* at 9.) The "pyramidal brace assembly" is "a brace assembly with a pyramid-like shape connected to the frame." (*Id.* at 14.) The "engine cradle" refers to "the part of the frame that supports the engine." (*Id.* at 20.) The term "disposed on" means "arranged to be carried by." (*Id.* at 24.) Finally, the phrase "seat position defined by the seat" means "a portion of the straddle-type seat positioned beneath the center of weight distribution of a 50th percentile North-American adult male weighing 78 kg and has the body the body build illustrated in FIGS. 9A, 9B and 10 seated in a natural operating position." (*Id.* at 35-36.)

Arctic Cat has filed two motions to exclude. One motion addresses Bombardier's damages experts, Claude Gelinas and Keith R. Ugone, as well as some opinions of Bombardier's technical experts, Robert Larson and Kevin Breen, (Arctic Cat's Mot. to Exclude Bombardier Damages & Other Expert Test., Mar. 25, 2016, Docket No. 656);

and the other motion addresses other opinions by Robert Larson and Kevin Breen, as well as those of Dr. Christine Raasch. (Arctic Cat’s Mot. to Exclude Dr. Raasch & Other Test., Mar. 27, 2016, Docket No. 685.) Bombardier has filed a motion to exclude portions of the testimony of Arctic Cat’s experts, David Karpik and Mark Warner, under Rule 702 and *Daubert*. (Bombardier’s Mot. to Exclude Expert Test., Mar. 26, 2016, Docket No. 667.)

ANALYSIS

I. STANDARD OF REVIEW

Under Federal Rule of Evidence 702, expert testimony must satisfy three prerequisites to be admitted:

First, evidence based on scientific, technical, or other specialized knowledge must be useful to the finder of fact in deciding the ultimate issue of fact. This is the basic rule of relevancy. Second, the proposed witness must be qualified to assist the finder of fact. Third, the proposed evidence must be reliable or trustworthy in an evidentiary sense, so that, if the finder of fact accepts it as true, it provides the assistance the finder of fact requires

Lauzon v. Senco Prods., Inc., 270 F.3d 681, 686 (8th Cir. 2001) (citations and internal quotation marks omitted). The district court has a gate-keeping obligation to make certain that all testimony admitted under Rule 702 satisfies these prerequisites and that “any and all scientific testimony or evidence admitted is not only relevant, but reliable.” *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 589 (1993). The proponent of the expert testimony has the burden of establishing by a preponderance of the evidence that the expert is qualified, that his or her methodology is scientifically valid, and that “the

reasoning or methodology in question is applied properly to the facts in issue.” *Marmo v. Tyson Fresh Meats, Inc.*, 457 F.3d 748, 757-58 (8th Cir. 2006).

The Supreme Court in *Daubert* outlined particular factors for courts to consider in assessing reliability, such as (1) whether the opinion is based on a methodology that is susceptible to testing, and whether it has been tested; (2) whether the opinion has been subjected to peer review; (3) whether there is a known or potential rate of error associated with the methodology; and (4) whether the relevant scientific community has generally accepted the methodology. *See Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 149-50 (1999) (summarizing *Daubert* factors). However, in *Kumho Tire*, the Court explained that

the test of reliability is “flexible,” and *Daubert*’s list of specific factors neither necessarily nor exclusively applies to all experts or in every case. Rather, the law grants a district court the same broad latitude when it decides **how** to determine reliability as it enjoys in respect to its ultimate reliability determination.

Id. at 141-42. The reliability inquiry is designed to “make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *Marmo*, 457 F.3d at 757 (quoting *Kumho Tire*, 526 U.S. at 152).

The Eighth Circuit has held that “[c]ourts should resolve doubts regarding the usefulness of an expert’s testimony in favor of admissibility.” *Id.* at 758; *see also Kumho Tire*, 526 U.S. at 152 (“[T]he trial judge must have considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable.”). “As a general rule, the factual basis of an expert opinion goes to the credibility

of the testimony, not the admissibility, and it is up to the opposing party to examine the factual basis for the opinion in cross-examination.” *Loudermill v. Dow Chem. Co.*, 863 F.2d 566, 570 (8th Cir. 1988). “Only if [an] expert’s opinion is so fundamentally unsupported that it can offer no assistance to the jury must such testimony be excluded.” *Bonner v. ISP Techs., Inc.*, 259 F.3d 924, 929-30 (8th Cir. 2001) (quoting *Hose v. Chi. Nw. Transp. Co.*, 70 F.3d 968, 974 (8th Cir. 1995)).

II. ARCTIC CAT’S MOTIONS TO EXCLUDE

A. Larson’s Expert Opinion

Arctic Cat challenges Bombardier expert Robert Larson’s infringement test protocol as unreliable. To determine the steering position and steering shaft angle of the accused snowmobiles, Larson physically measured several exemplar snowmobiles. (Decl. of Annamarie Daley in Supp. of Arctic Cat’s Mot. to Exclude (“First Daley Decl.”), Ex. F ¶¶ 36-37, Mar. 25, 2016, Docket No. 663.) Recognizing that “snowmobiles having the same chassis and steering assembly may have slightly different pitch attitudes based on the snowmobiles suspension system and settings,” Larson then also “derived pitch attitudes for [all] the accused Arctic Cat snowmobiles from the floorboard angle in the graphical depictions of the snowmobile provided on the Arctic Cat website,” which he used “to establish a pitch attitude range for snowmobiles within a representative grouping.” (*Id.* ¶¶ 38-39.)

Arctic Cat argues that Larson’s use of website images to determine the pitch attitude of Arctic Cat snowmobiles renders his opinions unreliable. Larson admitted that

he did not know of anyone else using website images of snowmobiles to determine differences in pitch attitude, and that the practice was not peer reviewed in any fashion. (First Daley Decl., Ex. J at 374:1-17.) However, he stated that he developed the technique as a new, practical methodology to determine “pitch angle ranges over an entire collection of snowmobiles offered multiple years,” which he considered a new question. (*Id.*) While the web-image technique was new, Larson verified its accuracy by comparing his physical measurements of several exemplar snowmobiles to the measurements found using the web-image technique, and found a margin of error of .2 degrees. (Decl. of Kevin D. Conneely for Pls.’ Opp’n (“Conneely Decl.”), Ex. E at 456: 20-457: 17, 465:24-466:18, Apr. 25, 2016, Docket No. 726.) Larson also stated that there were no peer reviewed materials about this technique “because it’s a unique question [so] there aren’t those kind of materials out there.” (*Id.* at 375:5-12.) While the technique is novel, Larson explained the reason and basis for developing his process, and he tested the technique by comparing the web-based measurements to his physical measurements. Therefore, the Court finds Larson’s test sufficiently reliable.

Arctic Cat also argues that Larson’s tests are unreliable because he could not know if the vehicles in the images were full of fuel at the time of the pictures, which was a condition he required for the vehicles he measured in person. (*Id.* at 457:19-458:10.) Larson acknowledged that he could not determine if the pictured vehicles were full of fuel, but stated that when he compared his physical measurements with the photos of those snowmobiles, he saw very little difference; thus, Larson concluded that either the pictured snowmobiles were also full of fuel, or fuel had very little effect on the

measurement. (*Id.*) Again, Larson fully explained the basis for his test protocol, and verified the protocol to the extent possible. The Court therefore does not find Larson's procedure unreliable based on his inability to verify whether the snowmobiles were photographed with full fuel tanks. Overall, the Court finds Larson's methods sufficiently reliable to satisfy rule 702, and therefore it will deny Arctic Cat's motion on this ground.¹

B. Breen's Expert Opinion

1. Relying on Larson

Arctic Cat argues that Breen's report should be excluded as not based on sufficient facts or data because Breen erroneously stated that he relied on information and data in the Larson report, which was not then present in the Larson report.² (*See* First Daley Decl., Ex. K ¶ 734.) Breen stated that "Larson's report contains groupings and measurements of the REV snowmobiles for the '669 patent." (*Id.*) At the time of Breen's initial report, which is dated November 12, 2015, the Larson report did not have analysis fitting that description: Larson's November 2015 report provided measurements for two Bombardier snowmobiles – 2003 REV MXZ and 2009 REV XP MXZ – but it did

¹ Arctic Cat also appears to argue that Larson's change from only measuring the accused snowmobiles with simulated riders, to measuring both with and without riders, renders Larson's test protocol unreliable. (First Daley Decl., Ex. C at EXP000933-934; *id.*, Ex. F ¶¶ 36-37 (noting the change from measuring with to without riders).) However, Arctic Cat does not explain how this change renders Larson's later opinions unreliable.

² Arctic Cat also argued that the Court should exclude Breen's report because it relied on Larson's report, which it argued was unsupported itself. However, as discussed in the prior section, the Court will deny Arctic Cat's motion to exclude the Larson report, and thus, to the extent Arctic Cat based its motion to exclude Breen's report on those same arguments, the Court will deny the motion to exclude Breen's report as well.

not discuss other Bombardier snowmobiles or groupings of Bombardier snowmobiles. (*Id.*, Ex. F ¶¶ 80-83.)

Arctic Cat argues that the error in Breen's initial report suggests that his opinions are not based on sufficient facts and data. Bombardier acknowledges that this statement in the Breen report was erroneous, but responds that Breen's report fully discussed Bombardier's snowmobiles and included Breen's own measurements of Bombardier's 2008 REV-XP snowmobile, and therefore, the erroneous introductory sentence does not render Breen's report unreliable. (*Id.*, Ex. K ¶¶ 1182-86.) Additionally, Larson's rebuttal report, dated December 14, 2015, contained information and analysis of additional Bombardier snowmobiles, (*id.*, Ex. H), which Breen's rebuttal report relied upon, (*see* Conneely Decl., Ex. M ¶¶ 113-119). The error was corrected, and Arctic Cat can raise any remaining problems with the data underlying Breen's conclusions on cross-examination. Larson's reports and Breen's reports both contain analysis of Bombardier's snowmobiles to support their opinions, and Arctic Cat has not called those analyses or data into question. Thus, the Court will deny Arctic Cat's motion with regard to Breen's measurements and reliance on Larson's opinion.

2. "Copying" Opinions

Arctic Cat next challenges Breen's opinions relating to Arctic Cat's "copying" of Bombardier's snowmobile designs. (*See* First Daley Decl., Ex. K ¶¶ 1154-86.) Arctic Cat challenges the relevance, factual basis, and reliability of Breen's copying opinions. First, Arctic Cat contends that copying and Arctic Cat's intent are not relevant to the

question of infringement. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1581-82 (Fed. Cir. 1996) (“A literal patent infringement analysis involves two steps: the proper construction of the asserted claim and a determination as to whether the accused method or product infringes the asserted claim as properly construed.”).

Bombardier responds that copying is relevant to several issues in the case, including willful infringement.³ *See Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*, 383 F.3d 1337, 1348-49 (Fed. Cir. 2004) (citing deliberate copying as a consideration for a finding of willful infringement). Arctic Cat acknowledges that copying can be relevant for willfulness but argues that expert testimony regarding willfulness is inappropriate.

Generally, willful infringement is a question for the jury, and several courts have found expert testimony on the ultimate issue of willfulness inappropriate. *See X-Tra Light Mfg. Inc. v. Acuity Brands, Inc.*, H-04-1413, 2007 WL 7117888, at *1 (S.D. Tex.

³ The other issues, not discussed much in the briefing, are: (1) enhanced damages for willful infringement, *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826-27 (Fed. Cir. 1992) (stating that the first factor in determining whether damages should be enhanced is whether the infringer deliberately copied the ideas of another) (*en banc*), *superseded on other grounds as recognized in Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1578 (Fed Cir. 1996); (2) showing no acceptable non-infringing alternatives to establish lost profits damages, *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1156 (6th Cir. 1978) (finding that to obtain damages for lost profits, the patent owner must show an “absence of acceptable noninfringing substitutes”), *Minemyer v. R-Boc Representatives, Inc.*, No. 07-1763, 2012 WL 2155240, at *11 (N.D. Ill. June 13, 2012) (stating that evidence of copying indicated the “absence of acceptable substitutes”); (3) showing nonobviousness, *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc.*, 699 F.3d 1340, 1349 (Fed. Cir. 2012) (considering evidence of copying a type of objective evidence of nonobviousness); and (4) rebutting affirmative defenses of laches and equitable estoppel, *A.C. Aukerman Co. v. R.L. Chaides Constr. Co.*, 960 F.2d 1020, 1033 (Fed. Cir. 1992) (*en banc*) (considering “[c]onscious copying” a factor weighing against a laches defense).

Feb. 13, 2007); *Pioneer Hi-Bred Int'l, Inc. v. Ottawa Plant Food, Inc.*, 219 F.R.D. 135, 142-43 (N.D. Iowa 2003). Those cases, involved purported expert testimony specifically regarding the “sufficiency of the evidence of willful infringement,” *Pioneer Hi-Bred*, 219 F.R.D. at 142-43, and easily interpretable willfulness evidence that did not require expert assistance, *X-Tra Light Mfg.*, 2007 WL 7117888, at *1.⁴ Breen’s testimony, however, is not about the sufficiency of evidence of willful infringement. Instead, Breen’s testimony would help the jury understand the technical evidence and provide relevant context regarding the snowmobile industry for the jury to determine if copying occurred. The Court therefore finds the testimony is not improper.

Arctic Cat also argues that Breen’s opinions are conclusory and not based on sufficient facts or data. Arctic Cat picks out several conclusions from Breen’s analysis, including his opinions that “Arctic Cat must have benefitted from the conceptual design and engineering work that [Bombardier] had already done for its MY 2003 REV snowmobile,” “Arctic Cat’s pyramidal design approach came from [Bombardier] REV snowmobiles,” and “Arctic Cat’s SDS stiffness goals came directly from its REV stiffness tests.” (First Daley Decl., Ex. K ¶¶ 1171-73.) However, Arctic Cat ignores the surrounding analyses leading to those conclusions. Breen stated that his conclusions are

⁴ Arctic Cat also cites *Rottlund Co. v. Pinnacle Corp.*, a copyright case in which the Eighth Circuit found that a district court erred in admitting expert testimony on copying because the jury was capable of answering the question. 452 F.3d 726, 732 (8th Cir. 2006). This case is not relevant because it involved copyright infringement, one element of which is copying, established either by direct evidence or a showing of access and similarity. *Id.* at 731. Copying is the ultimate issue in a copyright case. *Id.* at 732.

based on his experience “working with research and development teams on recreational vehicles, including snowmobiles,” as well as the documents produced by Arctic Cat and testimony of Arctic Cat employees cited throughout his analysis. (*Id.* ¶¶ 1169-86.) The copying opinions Arctic Cat highlights are based on the timeline of Arctic Cat’s snowmobile development compared to a typical timeline in Breen’s experience, as well as his interpretation of Arctic Cat’s technical design goals and their similarity to the Bombardier REV snowmobile’s specifications. (*Id.* ¶¶ 1170-75.)

Finally, Arctic Cat disputes the conclusions that Breen draws about Arctic Cat’s motivations, pointing to its own expert, David Karpik, who reaches a different conclusion. (*See* Decl. of David Karpik (“Karpik Decl.”), Ex. A ¶¶ 218-50, Mar. 25, 2016, Docket No. 662.) However, Karpik’s and Breen’s disagreement on the implications of the technical documents and testimony does not render Breen’s testimony unreliable; rather, the jury may hear from both experts and find for itself. *See Johnson v. Mead Johnson & Co.*, 754 F.3d 557, 564 (8th Cir. 2014) (finding that where “expert testimony [is] within ‘the range where experts might reasonably differ,’ the jury, not the trial court, should be the one to ‘decide among the conflicting views of different experts’” (quoting *Kumho Tire*, 526 U.S. at 153)).

Overall, the Court finds that Breen’s copying opinions relate to a permissible purpose – interpreting technical data and providing context for the jury’s decision regarding willfulness – and that there is not too great an analytical gap between the facts and Breen’s conclusions to warrant exclusion. Accordingly, the Court will deny Arctic Cat’s motion to exclude Breen’s opinions regarding copying.

C. Raasch's Expert Opinion

1. Construing Terms

Arctic Cat argues that the Court should exclude portions of Raasch's opinion because she improperly provided expert testimony regarding claim construction. The Court construed "seat position defined by the seat," as "a portion of the straddle-type seat positioned beneath the center of weight distribution of a 50th percentile North-American adult male weighing 78 kg and has the body build illustrated in FIGS. 9A, 9B and 10 seated in a natural operating position." (Claim Construction Order at 35-36.) Arctic Cat contends that much of Raasch's expert report further defined and interpreted the Court's construction. Raasch acknowledged the Court's construction, and then opined on how a person having ordinary skill in the art (a "POSITA") would understand several terms included in the Court's definition, including "center of weight distribution," "50th percentile North-American adult male," and "seated in a natural operating position." (Decl. of Annamarie Daley in Supp. of Arctic Cat's Mot. for Summ. J. ("Second Daley Decl."), Ex. AA ¶¶ 17-30, Mar. 27, 2016, Docket No. 684.)

Raasch stated that

a person of ordinary skill in the art would understand that the phrase "center of weight distribution" refers to the point on the surface of the seat within the contact area between rider and seat where the weight of the rider is supported by the seat. This refers only to the portion of rider weight supported by the seat, and is distinct from the center of gravity. This is a common ergonomic concept, also called "center of pressure," used in the design of seating for passenger cars and other vehicles, work stations, wheelchairs, child restraints, etc. It is my further opinion that a person of ordinary skill in the art would readily understand that a reasonable approximation of the location of the center of weight distribution of a rider

on the straddle seat is the point at which a line passing through the rider's shoulder joint and hip joint intersect the seat surface.

(*Id.* ¶ 20.) Raasch also suggested that a reader could avoid an apparent transcription error in the patent figures referenced in the Court's claim construction definition because a POSITA would recognize the obvious error and know to look at the figures in an earlier patent application or at the proper dimensions in "commonly used ergonomics references." (*Id.* ¶¶ 24-25.) Finally, Raasch opined that a POSITA

would understand that "seated in a natural operating position" means that the rider is seated in a manner to allow sufficient flexibility to minimize muscular effort associated with control of the snowmobile such that his hands are placed on the handlebar grips with wrists neutral, elbows flexed at 20-40 degrees from full extension (180 degrees), lower legs in light contact with the bolster (where applicable), the inside surfaces of the knees/thighs against the sides of the seat, and the feet as far forward as possible on the footrest surface, and torso leaning forward from vertical.

(*Id.* ¶ 30.)

Arctic Cat argues that claim construction is a matter of law exclusively for the court, and that once the claims are construed, further expert testimony about the meaning of those claims is improper. *See CytoLogix Corp. v. Ventana Med. Sys., Inc.*, 424 F.3d 1168, 1172 (Fed. Cir. 2005) (finding error where the court engaged in claim construction at the close of evidence, and expert witnesses discussed opposing claim constructions before the jury, causing confusion); *EZ Dock, Inc. v. Schafer Sys., Inc.*, No. 98-2364, 2003 WL 1610781, at *7, 12 (D. Minn. Mar. 8, 2003) (stating that expert testimony on claim construction is improper because "issues of law are not properly the subject of expert testimony").

Bombardier counters that Raasch is not further construing the claims; she is responding to Arctic Cat's arguments and Karpik's opinion that the Court's definition of "seat position defined by the seat" is indefinite. Because the Court will grant Bombardier's motion with regard to Karpik's indefiniteness testimony, as discussed below, Raasch's testimony may be irrelevant at trial. However, based on the arguments before the Court, it will deny Arctic Cat's motion at this time. In contrast to Karpik's expert opinions, discussed below, Raasch did not contradict the Court's claim construction by offering her own interpretation of the claim term or reasserting a rejected claim definition; instead, Raasch opined on how a POSITA would follow the Court's construction of the claim term in practice and how she would apply the Court's construction in her testing procedures. Thus, the Court will deny Arctic Cat's motion at this time, but the Court notes that some of Raasch's testimony may not be relevant at trial to the extent it sought to rebut Karpik's indefiniteness opinions.

2. Figures Applied

Relatedly, Arctic Cat also argues that Raasch's expert testimony as a whole should be excluded because she disregarded the Court's claim construction by failing to perform her tests using the erroneous figures cited in the Court's claim construction order and the patent. Bombardier contends that Raasch acted reasonably in noticing the errors, and she applied acceptable methodology and scientific principles in using the style of dummy that she did, which closely matches the "50th percentile North-American adult male weighing 78 kg," and with "the body the body build illustrated in FIGS. 9A, 9B and 10." (Claim

Construction Order at 35-36; *see also* Second Daley Decl., Ex. AA ¶¶ 22-28, 31; Conneely Decl., Ex. I at 57:19-61:3.) Because both parties appear to admit that the particular figures in the instant patent and mentioned in the Court’s claim construction order contain several errors, it is reasonable for Raasch to account for those errors and choose the most closely related test dummy, and therefore, this decision does not render her work unreliable. Accordingly, the Court will deny Arctic Cat’s motion on this ground.

3. Qualifications

Arctic Cat also argues that the Court should exclude Raasch’s opinions regarding the term “seated in a natural operating position” because she is not qualified to give them and they are not based on reliable principles and methods. Arctic Cat bases its argument on the fact that Raasch has never ridden a snowmobile, she did not perform tests to determine the natural positioning on a snowmobile, she did not consult references or texts, and she has never worked for Bombardier prior to this case. (Second Daley Decl., Ex. BB at 168:1-169:4, 189:12-193:2, 194:22-195:8, 261:9-14; *id.*, Ex. AA ¶ 11.)

Raasch’s qualifications include a B.S. and Ph.D. in Mechanical Engineering and publication of peer-reviewed papers related to “biomechanics of human movement and injury[and] vehicle occupant dynamics and kinematics,” among other things. (Conneely Decl., Ex. N ¶¶ 5-6.) She has “conducted test projects including full-scale vehicle crash and sled testing, motorcycle testing, human surrogate testing, and specialized biomechanical studies such as helmet impact testing,” and she leads an

“Anthropomorphic Test Dummy (ATD) laboratory,” where she oversees testing using those dummies. (*Id.* ¶ 7-8.) She has experience “in measurement of seating positions in motor vehicles using the H-point machine, per SAE Standard J826.” (*Id.* ¶ 8.) Bombardier also contends that Raasch’s opinions regarding the “natural operating position” are based on relevant facts from the ‘669 patent. Raasch considered Figure 2 of the ‘669 patent, (*id.* ¶ 29), and “the teaching of the patent,” (Second Daley Decl., Ex. BB at 190:3-14). She also sat on the snowmobile herself, considered another human rider, and relied on her experience. (Second Daley Decl., Ex. BB at 191:9-13, 194:13-21.)

Arctic Cat makes much of Raasch’s admission that she has never ridden a snowmobile, but Bombardier is not relying on her experience with snowmobiles to establish her as an expert. Based on her education and experience in the field of mechanical engineering, using test dummies, and with biofidelity, Raasch qualifies as an expert. Raasch applied that expertise to the facts of this case by examining the patent figures and a physical snowmobile and human rider. Thus, the Court will deny Arctic Cat’s motion to exclude based on Raasch’s qualifications. To the extent Arctic Cat decides to challenge the underlying factual basis for Raasch’s work, it may do so with its own expert or on cross-examination.

D. POSITA Definitions

Arctic Cat also challenges the entirety of Breen’s, Raasch’s, and Larson’s opinions, arguing that these experts relied on a different definition of “POSITA” than that established in the Court’s claim construction order. The Court found that “a person of

skill in the art would have an engineering degree and/or years of experience designing recreational vehicles.” (Claim Construction Order at 5.) In contrast, Breen acknowledged the Court’s definition, but also stated that in his opinion, “the POSITA of the ‘669 Patent would also have a working knowledge of Human Factors (*e.g.*, Ergonomics, Human Kinesiology/Biomechanics).” (First Daley Decl., Ex. K ¶ 30.) Raasch stated that a POSITA would have some combination of engineering education or experience in engineering or design.⁵ (Conneely Decl., Ex. I at 123:1-5, 124:5-11, 125:6-20.) Larson stated that a POSITA would have experience or education in engineering, technical design, or ergonomics. (*Id.*, Ex. E at 105:4-107:20.) Arctic Cat argues because these definitions are not identical to the Court’s definition, the Court should exclude all testimony based on them.

However, the Court finds that the experts’ identification of POSITAs did not necessarily conflict with the Court’s definition in its claim construction; instead, the experts opined that a POSITA fitting the Court’s description would also have these additional or particular skills or knowledge. The Court will therefore deny Arctic Cat’s motion on this ground.

⁵ For example, Raasch stated a POSITA would be “an engineer or a person with experience in vehicle design or a person who would be applying ergonomic information to vehicle design. So it could be various kind[s] of experiences, a background of engineering, ergonomics, technical design, biomechanics, that kind of background.” (Conneely Decl., Ex. I at 124:6-11.)

E. Damages Experts' Opinions

1. *Panduit* Analysis

Arctic Cat challenges several aspects of the opinions of Bombardier's damages experts, Claude Gelinas and Keith R. Ugone. First, Arctic Cat challenges Bombardier's damages experts' analysis of the *Panduit* factors necessary to establish lost profits. Under *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, to establish lost profits recoverable as damages, the patent owner must show: "(1) demand for the patented product, (2) absence of acceptable noninfringing substitutes, (3) his manufacturing and marketing capability to exploit the demand, and (4) the amount of the profit he would have made." 575 F.2d 1152, 1156 (6th Cir. 1978); see *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1577 (Fed. Cir. 1989) (adopting *Panduit* test).

Arctic Cat challenges Ugone's analysis of the second *Panduit* factor: the absence of acceptable noninfringing substitutes. Arctic Cat contends that Ugone admitted there were noninfringing substitutes because Arctic Cat sold snowmobiles that were not accused of infringement in 2012 and 2013, and riders could obtain the forward position from Bombardier's patents by sitting forward on the snowmobile. (First Daley Decl., Ex. O at 148:5-19.) However, even if Arctic Cat's interpretation of this alleged admission were accurate, Bombardier could still seek recovery under a market-share analysis, which can replace the second *Panduit* factor in the context of multi-supplier markets. *Mor-Flo Indus.*, 883 F.2d at 1577-78.

Arctic Cat acknowledges that under *Mor-Flo*, in certain circumstances "the presence or absence of acceptable noninfringing alternatives does not matter." *Id.* at

1578. Arctic Cat argues that Bombardier has not established that those special circumstances apply in this case. While Bombardier does not discuss in detail the reasons that the *Mor-Flo* analysis applies here, Ugone discussed his reasons for pursuing this analysis in his report, and Arctic Cat has not challenged those reasons in its briefing. (See First Daley Decl., Ex. N ¶¶ 90-98.) Because the presence of noninfringing substitutes is not necessarily fatal to Bombardier's claims, Ugone's admission does not render his opinions unreliable or fundamentally unsupported, and the Court will deny the motion to exclude.

Arctic Cat also challenges several other aspects of Ugone's analysis, which it contends are part of the *Panduit* analysis without pointing to any particular *Panduit* factor. First, Arctic Cat challenges Gelinas' use of budgeted numbers as part of his "contribution margin" analysis and Ugone's reliance on those numbers in his analysis. Gelinas admitted that he began with budgeted numbers rather than actual numbers, but Gelinas also stated that his "objective was to calculate adjustments in order that the various components of the contribution margin SKU by SKU included in the sku-tools represent actual instead of budgeted data." (*Id.*, Ex. P ¶ 27.) Gelinas described his methodology for arriving at a contribution price throughout the rest of his report, and he did not rely solely on the budgeted price without further analysis. (*Id.* ¶¶ 30-73.) Arctic Cat has not specified any flaws rendering this methodology unreliable. To the extent Arctic Cat challenges the basis for Gelinas' opinion, it may do so on cross-examination; but, based on the argument before the Court, it does not find Gelinas' opinion fundamentally unsupported or unreliable so as to warrant exclusion.

Arctic Cat also argues that Ugone did not conduct an independent analysis of Bombardier's manufacturing capacity. Bombardier admits that Ugone relied on testimony by Bombardier employees as well as Bombardier's past sales. (*See, e.g.,* Conneely Decl., Ex. A ¶¶ 6(c), 7 n.26.) Arctic Cat, however, does not suggest what type of independent analysis would have been necessary, or how Ugone's analysis was insufficient. Bombardier contends that based on Ugone's report, the additional sales would have only resulted in an additional three or four production days to manufacture. (*Id.* ¶ 6(c).) Ugone also found that in fiscal year 2013 "[Bombardier]'s actual unit sales plus lost unit sales" were "less than the maximum annual amount historically manufactured and sold." (*Id.*) Because Ugone's finding that Bombardier had sufficient manufacturing capacity is not fundamentally unsupported or unreliable, the Court will deny Arctic Cat's motion.

Finally, Arctic Cat challenges Ugone's discussion of a Bombardier employee's lost profit estimate. Arctic Cat suggests that Ugone relied on the number provided by Pascal Vincent, Bombardier's global product manager. Ugone's report does discuss Vincent's estimate that "Arctic Cat would have lost 5% to 10% of its total U.S. market share to [Bombardier] had Arctic Cat not introduced the Accused Products." (*Id.* ¶ 113.) However, Ugone did not adopt that number; rather, he considered other factors, including a 2012 MY Snowmobile Owner Study prepared for Arctic Cat, and reached the conclusion that Bombardier would have made additional sales amounting to 5 to 10 percent of Arctic Cat's **accused product** sales – significantly less than Vincent suggested. (*Id.* ¶¶ 114-15.) Again, Arctic Cat does specify how this analysis was

improper and ignores much of Ugone’s supporting reasoning. The Court does not find Ugone’s methods unreliable or his lost-profit analysis factually unsupported and will deny Arctic Cat’s motion.

2. Convoyed Sales/Accessories

Next, Arctic Cat challenges Ugone’s opinion regarding lost profits on convoyed sales of parts, accessories, and warranties, arguing that Bombardier has not shown a functional relationship for the sales. Both sides cite *Warsaw Orthopedic, Inc. v. NuVasive, Inc.*, in which the Federal Circuit held:

To be entitled to lost profits for convoyed sales, the related products (e.g., the fixations) must be functionally related to the patented product and losses must be reasonably foreseeable. Being sold together merely for “convenience or business advantage” is not enough. If the convoyed sale has a use independent of the patented device, that suggests a non-functional relationship.

778 F.3d 1365, 1375 (Fed. Cir. 2015) (internal citations omitted), *vacated on other grounds by Medtronic Sofamor Danek USA, Inc. v. NuVasive, Inc.*, 136 S. Ct. 893 (2016).

Arctic Cat contends that Ugone’s analysis did not include any evidence of a functional relationship between the snowmobiles and the parts, accessories, and warranties. However, Ugone discussed the basis for his finding that convoyed sales apply here. (First Daley Decl., Ex. N ¶ 122 (stating that snowmobile owners generally purchase parts and accessories due to the wear and tear of their snowmobiles, and typically purchase warranties at the initial time of purchase).) Additionally, several cases suggest that lost profits on spare parts are recoverable. *See King Instruments Corp. v. Perego*, 65 F.3d 941, 953 (Fed. Cir. 1995) (finding no error in district court’s award of

lost profits for spare parts for loading device); *Carborundum Co. v. Molten Metal Equip. Innovations, Inc.*, 72 F.3d 872, 882 (Fed. Cir. 1995) (discussing lost profit for spare parts). Thus, the Court will deny Arctic Cat's motion with regard to Ugone's convoyed sales opinion because the opinion is factually supported.

3. Reasonable Royalties

Arctic Cat argues that Ugone failed to apportion the profits between patented and unpatented features when determining his royalty opinion and that he used the same proposed royalty number for one or more of the accused patents, and therefore, the Court should exclude his royalty opinion. Arctic Cat states that apportionment is required even for non-royalty forms of damages. *See Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1226 (Fed. Cir. 2014) ("Indeed, apportionment is required even for non-royalty forms of damages: a jury must ultimately 'apportion the defendant's profits and the patentee's damages between the patented feature and the unpatented features' using 'reliable and tangible' evidence." (quoting *Garretson v. Clark*, 111 U.S. 120, 121 (1884))).

Bombardier contends that Ugone properly considered apportionment when applying the *Georgia-Pacific* factors in ten pages of his report. (*See* Conneely Decl., Ex. A ¶¶ 159-78.) In that section of Ugone's report, he opined regarding what would have happened in a hypothetical negotiation between Bombardier and Arctic Cat. (*Id.*) Ugone considered Arctic Cat's projections of increased profit per unit with the infringing snowmobile over a noninfringing snowmobile model, Arctic Cat's actual increase in per-unit incremental profits with the infringing snowmobile over the noninfringing

snowmobile, and the market success and demand for snowmobiles with the patented feature. (*Id.*) Arctic Cat contends that this analysis did not specifically apportion profits between the patented and unpatented features; rather, Ugone simply attributed all of the projected increase in profits between prior or noninfringing snowmobiles to the patented feature. But, in fact, Ugone discussed his basis for attributing the demand for the accused snowmobiles to the patented features, (*id.* ¶¶ 170, 173), in addition to the discussion of Arctic Cat’s projected and actual increase in profits, as discussed above.

Ugone did not attribute all profits of the infringing snowmobiles to the patented invention, only the increase in profit for infringing snowmobiles over noninfringing snowmobiles. (*Id.* ¶ 187 (finding a reasonable royalty rate of \$350, whereas the profits of accused snowmobiles ranged from \$1,602 to \$2,872).) While Ugone did not explicitly discuss apportionment of the patented versus unpatented features, he made related and substantially the same inquiries as part of his *Georgia-Pacific* royalty analysis. See *AstraZeneca AB v. Apotex Corp.*, 782 F.3d 1324, 1338 (Fed. Cir. 2015) (“The standard *Georgia-Pacific* reasonable royalty analysis takes account of the importance of the inventive contribution in determining the royalty rate that would have emerged from the hypothetical negotiation.”).

Arctic Cat also challenges Ugone’s royalty opinion, arguing that he failed to differentiate between the royalty rate for the ‘847/’848 patents and the ‘669 patents. Ugone did not distinguish between the patents in his royalty rate analysis. He discussed the “advantages of the Patents-in-Suit,” but did not discuss the relative advantages of either particular patent. (Conneely Decl., Ex. A ¶ 173.) Bombardier responds that

Ugone’s decision to treat all of the patents as having the same value was not unreasonable, as he found that all of the patents related to a frame that would allow a rider a more forward aggressive position. (*Id.*) While Arctic Cat can challenge the basis for this opinion, the Court does not find it wholly unsupported and will deny Arctic Cat’s motion with regard to Ugone’s apportionment opinion.

III. BOMBARDIER’S MOTION TO EXCLUDE

A. Karpik’s Expert Opinion

1. Conflicts with the Court’s Claim Construction

Bombardier argues that the Court should exclude several of Karpik’s opinions as inconsistent with the Court’s construction of the patent claims. “No party may contradict the court’s construction to a jury.” *Exergen Corp. v. Wal-Mart Stores, Inc.*, 575 F.3d 1312, 1321 (Fed. Cir. 2009); *see also Kellogg v. Nike, Inc.*, No. 8:07CV70, 2008 WL 4216130, at *1 (D. Neb. Sept. 12, 2008) (“[A]ny argument or evidence inconsistent with the court’s claim construction is irrelevant.”).

i. “engine mounted in the engine cradle”

Bombardier’s first argument relates to Karpik’s opinion that Arctic Cat’s accused snowmobiles do not satisfy the “engine mounted in the engine cradle” limitation of the ‘847/’848 patent because the engines can only be mounted **on** rather than **in** the engine cradle, since the engine cradle is a flat surface without walls. (Decl. of Joseph A. Farco in Supp. of Pls.’ Mem. in Supp. of Mot. to Strike (“Farco Decl.”), Ex. H ¶¶ 57-60,

Feb. 18, 2016, Docket No. 604.) Bombardier argues that the Court foreclosed this line of argument by rejecting a similar argument during claim construction.

Arctic Cat argued during claim construction that an engine cradle must have side walls because “[t]he claim language that the engine is ‘mounted in’ the cradle clearly requires something more than a flat surface or simple mounting point.” (Defs.’ Claim Construction Br. at 13, Dec. 19, 2014, Docket No. 448.) The Court rejected this argument, construing the term “engine cradle” to mean “the part of the frame that supports the engine.” (Claim Construction Order at 20.) The Court did not explicitly discuss the “mounted in” language in the claim construction order, but stated that its construction was “consistent with the claim language and the specification,” including the description of the “invention as including ‘a frame assembly that also includes an engine **disposed in** the engine cradle.’” (*Id.* (emphasis added).) Karpik’s opinion clearly runs afoul of the Court’s analysis, considering the similarity of the “disposed in” and “mounted in” language; if followed, Karpik’s opinion would require side walls for the engine cradle – which the Court explicitly rejected. The Court will therefore grant Bombardier’s motion with regard to Karpik’s construction of “engine mounted in the engine cradle” because it is inconsistent with the Court’s claim construction order.

ii. “straddle seat disposed on the tunnel” and “skis disposed on the frame”

Next, Bombardier challenges Karpik’s opinion related to the interpretation of “disposed on” in the “straddle seat disposed on the tunnel” and the “skis disposed on the frame” claim limitations. During claim construction, Arctic Cat argued that disposed on

meant “placed directly on,” but the Court rejected Arctic Cat’s argument, and construed “disposed on” to mean “arranged to be carried by.” (Defs.’ Claim Construction Br. at 16-17, 24; Claim Construction Order at 24.) Karpik opined that the application of the Court’s interpretation of “disposed on” in those claims renders the claims indefinite “because the scope of the claims cannot be determined with reasonable certainty.” (Farco Decl., Ex. H ¶¶ 67, 70.)

Karpik stated that the way Bombardier’s expert, Breen, applied the Court’s interpretation, “any element on a snowmobile is ‘arranged to be carried by’ any other element.” (*Id.*) Bombardier points out that Arctic Cat made this same indefiniteness argument during claim construction, and thus, by raising the argument again and arguing that the Court’s construction renders the claim indefinite, Arctic Cat is contravening the Court’s construction. Arctic Cat argues that Karpik’s indefiniteness opinion responds to Breen’s application of the claim language and that Karpik’s opinion is not challenging the Court’s construction, but rather Breen’s application. Additionally, Arctic Cat argues that the Court’s claim construction order did not rule that the claim could not be found indefinite. However, “a determination of claim indefiniteness is a legal conclusion that is drawn from the court’s performance of its duty as the construer of patent claims.” *Personalized Media Commc’ns, LLC v. Int’l Trade Comm’n*, 161 F.3d 696, 705 (Fed. Cir. 1998). In construing the patent term, the Court already found what a POSITA would understand that particular claim language to mean in light of the patent as a whole; further argument regarding the definiteness of that interpretation contravenes the Court’s construction. *See Aero Prods. Int’l, Inc. v. Intex Recreation Corp.*, 466 F.3d 1000, 1015-

16 (Fed. Cir. 2006) (“If a claim is amenable to construction . . . the claim is not indefinite.”). Accordingly, the Court will grant Bombardier’s motion with regard to this portion of Karpik’s opinion.

iii. “pyramidal brace assembly connected to the frame”

Bombardier challenges Karpik’s opinion that the accused snowmobiles did not satisfy the “pyramidal brace assembly connected to the frame” limitation because the structure that corresponds to the claimed “pyramidal brace assembly” was actually “a part of the frame,” and therefore, could not be “connected to the frame.” (Farco Decl., Ex. F ¶¶ 264-65; *id.*, Ex. H ¶ 27.) Bombardier argues that this opinion is inconsistent with the Court’s construction of the term “pyramidal brace assembly” as “a brace assembly with a pyramid-like shape connected to the frame,” and construction of “frame” as “the structural core of the snowmobile that holds, carries, or supports other components.” (Claim Construction Order at 9, 14.)

Arctic Cat argues that Karpik only opined that the accused products did not infringe because the alleged “pyramidal brace assembly” of the accused snowmobiles could not be “connected to the frame” because they were in fact part of the frame. However, the portion of Karpik’s opinion that Bombardier challenges did not discuss Arctic Cat’s products; rather, Karpik was only discussing the patent language itself. (Farco Decl., Ex. F ¶¶ 264-65.) Karpik did so without mentioning the Court’s prior construction of “frame” or “pyramidal brace assembly.”

In response, Arctic Cat relies on *Cutsforth, Inc. v. MotivePower, Inc.*, in which the Federal Circuit found that a claim reciting a “brush catch coupled to the beam” needed a “brush catch” as a separate physical structure, not a sub-component of the beam, otherwise the words “coupled to” would be meaningless. 643 F. App’x 1008, 1012-13 (Fed. Cir. 2016). This case is inapposite, however, because Bombardier acknowledges that the pyramidal brace assembly and the frame are separate physical structures, and the Court found as much in its claim construction order. (Claim Construction Order at 9, 14 (finding the “frame” is “the structural core of the snowmobile that holds, carries or supports other components,” while the “pyramidal brace assembly connected to the frame” refers to “a brace assembly with a pyramid-like shape connected to the frame”).) The challenged portion of Karpik’s opinion ignores the Court’s construction. Because “[n]o party may contradict the court’s construction to a jury,” *Exergen*, 575 F.3d at 1321, and allowing Karpik to do so would confuse the jury, the Court will grant Bombardier’s motion with regard to Karpik’s pyramidal brace assembly opinion.

iv. “apex”

Bombardier also challenges Karpik’s opinion referring to the “apex” as the “common area.” The Court construed “apex” as “[t]he uppermost part of the pyramidal brace assembly.” (Claim Construction Order at 15.) But, in his expert report, Karpik

instead referred to the apex interchangeably as the “common area” (*See* Farco Decl., Ex. F ¶¶ 61, 110, 146, 150, 222.)⁶

Arctic Cat rightly states that these definitions do not necessarily conflict: there is no reason that the “uppermost part of the pyramidal brace assembly” cannot be located at a “common area.” But, the problem is that Karpik used “common area” as the definition for “apex,” without regard to whether it was also the “uppermost part of the pyramidal brace assembly.” Arctic Cat also points out that Bombardier used the term “common apex” in its summary judgment brief. In those statements, however, “common apex” was not acting as a definition of apex. The Court will therefore grant Bombardier’s motion and exclude Karpik’s opinions to the extent that he used the term “common area” interchangeably with “apex” without regard to whether the area is also the “uppermost

⁶ Specifically, Karpik stated the following: “the front tube, rear tube, and U-shaped tube meet at a **common area** (*i.e.*, **an apex**) forming a triangular-shaped structure,” (Farco Decl., Ex. F ¶ 61 (emphasis added)); in discussing patent language stating that parts come together at a “common point,” Karpik stated that “one skilled in the art would understand that it would not be necessary for the bars to come to a common point, but rather a common area,” and that the patents “give little or no guidance to the dimensions of that common area (**which is later described as the ‘apex’**),” (*id.* ¶ 110 (emphasis added)). Also in reference to the TS/Mod sled, Karpik stated “the front tubes and rear tubes come to a common area or point, which is the same as the ‘apex’ described and claimed in the ‘847 and ‘848 Patents,” (*id.* ¶ 146); later, he stated that while the TS/Mod’s connections of tubes and legs “are not symmetrical[,] [t]he person skilled in the art would understand this area to be the apex, and would consider this assembly to be an interconnection of the left and right rear tubes with the left and right front tubes in a common area,” (*id.* ¶ 150); finally, he stated that this area of connection “is trapezoidal in shape and serves as the common area (**apexial**) in which the front and rear legs meet,” (*id.* ¶ 222 (emphasis added)).

part of the pyramidal brace assembly,” because such usage is inconsistent with the Court’s definition and would confuse the jury.⁷

2. Snowmobile and Skis

Bombardier challenges Karpik’s conclusions that the T/S Mod sled was a snowmobile and had skis and the basis for those opinions because those terms were not submitted for the Court’s construction and because Karpik considered anecdotal extrinsic evidence rather than the intrinsic patent record. Claim terms are read in light of the intrinsic patent record. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1324 (Fed. Cir. 2005) (recognizing the primacy of intrinsic evidence in claim construction and that extrinsic evidence cannot be “used to contradict claim meaning that is unambiguous in light of the intrinsic evidence”). “The words of a claim are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art when read in the context of the specification and prosecution history.” *Thorner v. Sony Comput. Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). But, “[t]o act as its own lexicographer, a patentee must ‘clearly set forth a definition of the disputed claim term’ other than its plain and ordinary meaning.” *Id.* (quoting *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002)).

⁷ Arctic Cat also notes that the Magistrate Judge addressed Karpik’s apex opinion. However, the Magistrate Judge’s order addressed only whether the apex discussion was inconsistent with Arctic Cat’s prior representations to the Court; the order did not discuss whether the opinion was inconsistent with the Court’s claim construction. (*See* Order at 48-50, Apr. 19, 2016, Docket No. 704.)

Bombardier initially did not point to any particular intrinsic definition of snowmobile or skis that Karpik ignored, but in its reply brief, Bombardier provided a single statement from the description of the embodiment section of the patent, which states: “As with any snowmobile, endless track 16 is operatively connected to motor (or engine) 18 to propel snowmobile 12 over the snow.” (App. List at 43, 5:45-48, Mar. 9, 2015, Docket No. 469.) The Court does not find that this single statement establishes a particular meaning for the terms “snowmobile” or “skis,” and Karpik may properly opine on the commonsense definitions of those terms. Neither party submitted those terms to the Court during claim construction, and thus, Karpik’s opinion does not contradict a prior construction of the Court. Accordingly, the Court will deny Bombardier’s motion to exclude.

3. Obviousness Opinions

Bombardier challenges Karpik’s opinions that the ‘847/’848 patents are invalid for obviousness because the arrangement of the legs into a pyramidal brace assembly was a “design choice.” Bombardier contends that Karpik opinions regarding “design choices” should be excluded because there is too great an analytical gap between Karpik’s conclusions and the supporting reasons. *See Kuhn v. Wyeth, Inc.*, 686 F.3d 618, 625 (8th Cir. 2012) (“Expert evidence may be excluded if the court determines ‘that there is simply too great an analytical gap between the data and the opinion proffered.’” (quoting *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 146 (1997))).

Bombardier points to several paragraphs that mention design choices within Karpik’s discussion of the Tsutsumikoshi patent, which Bombardier argues are conclusory and do not take into account the purpose or design alternatives available. (*See* Farco Decl., Ex. F ¶¶ 239, 243, 247.) However, the statements are surrounded by Karpik’s analysis on which they are based. Throughout the Tsutsumikoshi section, Karpik suggested that it would have been obvious to combine the BLADE snowmobile with the Tsutsumikoshi patent, and he discussed motivations, such as that the pyramidal frame “was a design choice available to achieve a snowmobile frame with sufficient rigidity and torsional resistance.” (*Id.* ¶ 247.) The same appears true of the other sections Bombardier cites. (*See e.g., id.* ¶ 252 (“A person of skill in the art clearly would have appreciated from general knowledge and from examining Yasunaga that the type of pyramidal frame taught in Yasunaga was a design choice available to achieve a snowmobile frame with sufficient rigidity and torsional resistance.”); *id.* ¶ 262 (“A person of skill in the art would have understood that the type of pyramidal frame taught in the ‘715 Patent presented design choices from which one could achieve a snowmobile frame with sufficient rigidity and torsional resistance, and have the option of adding a sub-frame to the snowmobile.”).)

Overall, Bombardier challenges Karpik’s use of the words “design choice,” while ignoring the surrounding context. To the extent Bombardier challenges the factual basis for Karpik’s opinion, or his conclusions, it can do so on cross-examination, but at this time, the Court does not find the opinion or conclusions fundamentally unsupported and will deny Bombardier’s motion.

4. Publication and Praise Opinions

Bombardier challenges one paragraph in Karpik’s expert report where he stated that he was “very skeptical about [Bombardier]’s interpretation of the significance of any industry praise” because the publications Bombardier cited as industry praise of its invention were not necessarily reliable. (Farco Decl., Ex. F ¶ 286.) Karpik stated that the publications were “not *Consumer Reports*-type of publications that [were] known for providing independent technical analysis of products,” but rather “trade publications that rel[ied] on the snowmobile industry – in particular, Bombardier, Polaris, Arctic Cat, and Yamaha – for both their advertising revenue and readership base.” (*Id.*) Karpik suggested that those publications promoted new product lines and “often over-emphasiz[ed] the significance of differences from previous model years or alleged ‘advancements’ in snowmobile technology in order to excite their readership and maintain relationships with the major manufacturers.” (*Id.*)

Bombardier challenges this opinion as subjective and unsubstantiated. However, Karpik based his opinion on his “decades of experience in the snowmobile industry.” (*Id.*) Karpik owns BLADE Motor Sports Group, which manufactures the BLADE snowmobile, and he has “more than 35 plus years’ experience building and designing snowmobiles.” (*Id.* ¶¶ 1, 7.) Bombardier also points to Karpik’s own citations to similar publications in his expert report when discussing his company’s BLADE snowmobile. (*Id.* ¶¶ 70, 280, 287.) However, those citations were not intended to demonstrate praise or industry success, but rather they were discussions of prior art. (*See e.g., id.* ¶ 280

(discussing a *SnowGoer* article mentioning Bombardier's REV snowmobiles because it acknowledged that Bombardier's REV was not the first snowmobile with a "rider forward" position).) Moreover, Bombardier's challenges are to the factual basis for Karpik's opinion, and the Court rejects them because, based on the record before the Court, Karpik's opinions are not fundamentally unsupported. *See Loudermill*, 863 F.2d at 570; *Bonner*, 259 F.3d at 929-30.

Overall, because Karpik is an expert in the relevant field, based his opinion on that experience, and gave the reasons for his opinion – such as the magazines' motivations for potential exaggeration – the Court does not find the challenged opinions unreliable or irrelevant. Rather, Bombardier's disputes go to the weight the jury should give to Karpik's opinion, and the Court will deny Bombardier's motion with regard to this opinion.

5. Commercial Success

Bombardier similarly challenges Karpik's qualifications to assert opinions rebutting Bombardier's assertion of commercial success – including consumer demand, market share, and consumer loyalty for the REV snowmobiles, as well as Arctic Cat's motivations to copy. (*See* Farco Decl., Ex. F ¶¶ 270, 272-73, 288-93; Karpik Decl., Ex. A ¶¶ 222, 230, 232, 240.) Bombardier contends that the Court should not allow Karpik to provide these opinions because he is not an expert with regard to sales, marketing, and industry studies, and he does not have experience or training as a financial or marketing analyst. Bombardier cites *Wheeling Pittsburgh Steel Corp. v. Beelman*

River Terminals, Inc., 254 F.3d 706, 715 (8th Cir. 2001), in which the court found that an expert qualified to testify on flood risks could not testify on warehouse safety because he lacked experience or education on that issue. Here, however, Karpik qualifies as an expert based on his experience in the snowmobile industry, including involvement “in the design, manufacture, and sales of the BLADE snowmobile.” (Farco Decl., Ex. F ¶ 13.) Karpik’s lack of experience as a financial or marketing analyst is not determinative because he has specific experience in designing, manufacturing, and selling in the pertinent industry. Accordingly, the Court will deny Bombardier’s motion to exclude with regard to Karpik’s commercial success opinions because they are based on Karpik’s experience.

6. Non-copying Opinions

Bombardier also challenges Karpik’s opinion that Arctic Cat did not copy Bombardier’s REV snowmobile, which Bombardier contends did not contain technical analysis or methodology and would confuse the jury. For the most part, the challenged opinions dispute the bases for Bombardier’s expert’s opinion regarding copying. (*See* Farco Decl., Ex. F ¶¶ 290-91 (rebutting evidence alleged to show commercial success as evidence of copying); *id.* ¶¶ 294-97 (disagreeing with Bombardier and Bombardier’s experts’ interpretation of several documents); Karpik Decl., Ex. A ¶ 219 (stating that the differences between the two products suggest that Arctic Cat did not copy); *id.* ¶ 239 (countering Breen’s suggestion that the length of time it took for Arctic Cat to develop its snowmobile suggested copying by suggesting that other existing art also could have

contributed to the shortened time, not just Bombardier's work).) Depending on the evidence eventually admitted at trial, many of Karpik's copying opinions may be irrelevant. However, they are related to Karpik's expertise, and because the Court is denying Arctic Cat's motion with regard to Breen's copying opinions, Karpik's responsive opinions providing alternative readings of Breen's supporting documents may be relevant as well.⁸

Bombardier also challenges one particular paragraph in which Karpik disputed Bombardier's assertions that Arctic Cat's "obtaining or analyzing [Bombardier]'s snowmobiles supports an inference of copying." (Karpik Decl., Ex. A ¶ 244.) Karpik stated that "[b]enchmarking competitive products is very common," and that a Bombardier employee had testified that Bombardier did it as well. (*Id.*) Finally, Karpik stated that, in his opinion, "there was nothing unethical or illegal about any Arctic Cat evaluation, analysis, inspection, tear-down, etc. of any [Bombardier] snowmobile." (*Id.*) Based on Karpik's experience and Bombardier's assertions of copying, the Court will allow general testimony about the practice of "benchmarking"; however, the Court

⁸ Bombardier also contends that Karpik's opinions regarding Arctic Cat's lack of motivation to copy Bombardier's snowmobiles should be excluded because he cannot speculate about a defendant's motivations. Bombardier cites *In re Baycol Products Litigation*, in which the court stated that "an expert witness' speculation as to the motivation of Defendants is outside the realm of Rule 702," 532 F. Supp. 2d 1029, 1054 (D. Minn. 2007); however, that case involved strict drug liability and excluded expert testimony about the defendant corporation's state of mind or intentions. Here, Bombardier seeks to show that Arctic Cat copied its snowmobile based on circumstantial evidence. Karpik did not assert that he could interpret Arctic Cat's state of mind at the time; rather, he sought to counter Breen's assertions that Arctic Cat would have had business motivations to copy.

cautions Karpik and Arctic Cat not to provide expert testimony regarding the legality or morality of the practice. *See In re Baycol Prods. Litig.*, 532 F. Supp. 2d 1029, 1053 (D. Minn. 2007) (“Personal views on corporate ethics and morality are not expert opinions.”). With that warning, the Court will deny Bombardier’s motion at this time – generally, Karpik’s opinions relate to his expertise and may be relevant at trial.

B. Warner’s Expert Opinion

1. Qualifications

Bombardier challenges Warner’s qualifications to serve as an expert in this case, arguing that Warner does not have professional experience in the relevant art – the design of recreational vehicles. Warner has a bachelor’s degree in manufacturing engineering, a master’s degree in mechanical engineering, and significant experience in the field of accident reconstruction and automotive testing. (Farco Decl., Ex. G at 4, 9; Decl. of Robert K. Goethals in Supp. of Pls.’ *Daubert* Mot. (“Goethals Decl.”), Ex. E, Mar. 26, 2016, Docket No. 670.) However, Bombardier contends that Warner’s education and experience is insufficient because he admitted that he has never designed a snowmobile. (See Goethals Decl., Ex. F at 79:3-5.)

Arctic Cat challenges Bombardier’s exclusive focus on Warner’s professional experience. Warner stated that in addition to his engineering background, “[d]uring the past 40-plus years, [he has] ridden thousands of hours on snowmobiles and become thoroughly familiar with various snowmobile designs.” (Decl. of Mark Warner in Opp. to Bombardier’s *Daubert* Mot. ¶ 9, Apr. 25, 2016, Docket No. 728.) During this time,

Warner has “owned over a dozen snowmobiles” and “completely disassembled and assembled snowmobiles and personally performed hundreds of repairs and modifications on snowmobiles,” including “machin[ing] parts for snowmobiles[and] weld[ing] broken snowmobile frames.” (*Id.*)⁹

Bombardier also argues that the Court should not permit Warner to opine about the Bombardier Twin Tracks and T/S MOD III because he does not have personal experience with them, has never attended an oval ice race or witnessed the sleds in operation, and has only seen an oval ice track from above, while in a plane, and in videos. (*See* Goethals Decl., Ex. F at 239:1-4; 242:17-243:16.) Arctic Cat counters that personal experience of the type Bombardier discusses is not necessary. Rather, Warner bases his conclusions on his examination of the snowmobiles and other sources, like transcripts and discussions with other experts. Bombardier also argues that Warner’s testimony that SnoScoots have adjustable handlebars and could operate in a forward steering position is

⁹ Bombardier also contends that Warner admitted he was not “an expert in snowmobile history.” (Goethals Decl., Ex. F at 80:7-13.) In fact, the Bombardier attorney admitted that was not a fair question. (*Id.* at 80:14-15.) Then the attorney asked if Warner considered himself an expert in the history of the design of snowmobiles from the time of the first snowmobile to present day, to which Warner responded,

I think I have a good understanding of the evolvement of the history of snowmobiles, but I don’t have . . . a memory of every snowmobile that was made. . . . But I do think I am an expert when it comes to the overall . . . snowmobile picture. I don’t know if I would call myself an expert in snowmobile history.

(*Id.* at 80:19-81:6.) Warner stated that he obtained this information from personal experience, reading snowmobile magazines, and studying snowmobile books. (*Id.* at 81:17-23.) The Court therefore rejects Bombardier’s assertion that Warner’s only experience with snowmobiles stemmed from this case.

speculative because he does not know of anyone using the snowmobile in that manner prior to 2015 when he did it himself. (*See id.* at 191:23-192:24.)¹⁰

The Court finds that Warner's degrees in engineering as well as his personal experience with snowmobiling and snowmobiling history are sufficient to qualify him as an expert. To the extent Bombardier challenges the factual basis of Warner's opinions it can do so on cross-examination. Accordingly, the Court will deny Bombardier's motion to exclude based on Warner's qualifications.

2. Anticipation and Obviousness Opinions

Bombardier next contends that the Court should exclude Warner's obviousness and anticipation opinions as irrelevant because they are "purely conclusory," and therefore, would not help the trier of fact. Bombardier points to the "Summary of Opinions" at the start of Warner's expert report, and repeated again at the end of the report, in which he listed which claims of the '669 patent were anticipated by various prior snowmobiles, (Farco Decl., Ex. G at 10-13), and stated that various combinations of

¹⁰ Bombardier also contends that Warner admitted that he was a "least skilled person in the art," better only than one who had never seen a snowmobile before. However, that somewhat mischaracterizes Warner's testimony. In fact, Warner and Bombardier's attorney discussed the broad range of individuals that would fall within the Court's definition of POSITA, including someone with an engineering degree and no experience to someone with many years of experience and a degree, as well as someone without a degree and two years of experience or without a degree and many years of experience. (Goethals Decl., Ex. F at 104:11-106:3.) The two then went through a lengthy exchange about levels of skill in the art, during which Warner stated that someone with extraordinary skill in the art would probably have a Ph.D. instead of a bachelors, and the attorney asked who a "person with less than ordinary skill in the art" would be, and Warner responded, "[m]aybe someone who's never seen a snowmobile before." (*Id.* at 112:6-24.)

features from prior snowmobiles would have been obvious, (*id.* at 14-23). Bombardier contends that those opinions are conclusory and not supported by technical analysis or explanation. However, Bombardier ignores the rest of the report, which provided the basis for Warner's opinions. (*Id.* at 55-71, 84-106.) To the extent Bombardier challenges the basis for these opinions, it can do so at trial; but, Warner's opinions are not entirely unsupported, and by citing only the summary of Warner's opinions, Bombardier does not squarely address Warner's methods or the basis for his opinions. The Court will therefore deny Bombardier's motion with regard to Warner's anticipation and obviousness opinions.¹¹

3. POSITA

Next, Bombardier argues that the Court should exclude Warner's obviousness opinions as unreliable and irrelevant because he applied a broad definition of a POSITA. Bombardier points to Warner's testimony as suggesting that he did not consider a particular POSITA during his analyses. (*See* Goethals Decl., Ex. F at 155:3-9.) However, in his testimony, Warner made clear that he applied the Court's definition of POSITA, (*id.* at 155:18-24; Farco Decl., Ex. G at 9), and Bombardier provides no case law or argument suggesting that following the Court's definition of POSITA is

¹¹ Bombardier also argues that Warner's obviousness discussion was based on an impermissible use of hindsight analysis. However, Bombardier mainly reasserts the same argument that Warner's obviousness analysis does not provide sufficient detail for why a POSITA would have known to make each addition. Bombardier provides no case citation for exclusion on this ground, arguing only that the opinions are unreliable and irrelevant. The Court sees no reason to exclude Warner's analysis on this basis.

insufficient, or that the Court must exclude expert testimony where the expert relies on a broad definition of a POSITA. Accordingly, the Court will deny Bombardier's motion on this ground.

4. Scaling the '669 Patent Figures

Bombardier argues that Warner's opinions and analysis based on his attempts to scale the figures from the '669 patent should be excluded because they relied on the incorrect technical assumption that the figures were drawn to scale. Warner admitted that he did not think that Figures 1-7 of the '669 patent were drawn to scale, but he used measurements from those figures multiple times in his report. (*See* Farco Decl., Ex. I at 74; *id.*, Ex. G at 46-55.) Arctic Cat contends that the inconsistencies between the figures are important and contribute to uncertainty about the meaning of the patent, which Arctic Cat argues is relevant to an indefiniteness and enablement challenge. Accordingly, Warner did not rely on an incorrect assumption that the figures were drawn to scale, as Bombardier suggests, but rather, he opined that inconsistencies between the figures could cause uncertainty. On the record before it, the Court does not find these methods unreliable or the conclusions unhelpful for this limited purpose, but the parties should use caution to ensure that the measurements do not confuse the jury. Accordingly, the Court will deny Bombardier's motion, and will not categorically exclude Warner's opinions regarding the figures in the '669 patent, but the Court will consider arguments regarding the relevance of any such testimony if the need arises at trial.

5. Position Measurements

Finally, Bombardier argues that Warner's position measurements and related opinions are unreliable because Warner completed them in a "loaded" position – with a rider test dummy – whereas, the patent specifies that its measurements are for an "unloaded snowmobile" – without a rider. Arctic Cat responds that Warner followed Bombardier's own test protocol, which specified that measurements should be taken with a dummy on the snowmobile. (*See* Decl. of Annamarie Daley in Supp. of Arctic Cat's Opp'n to Bombardier's *Daubert* Mot., Exs. C, S, Apr. 25, 2016, Docket No. 720.) Because the measurements are not necessarily unreliable, the Court will deny Bombardier's motion.

Bombardier also argues that Warner's measurements are unreliable because they vary widely from Arctic Cat's prior art statement and the measurements of Bombardier's expert in the related Canadian litigation. The three sets of measurements suggest significant variation. However, no single set of measurements is a clear outlier, and therefore, the comparison does not establish that Warner's current numbers are unreliable. Accordingly, the Court will deny Bombardier's motion with regard to Warner's position measurements.

This case will be placed on the Court's next available trial calendar.

ORDER

Based on the foregoing, and all of the files, records, and proceedings herein, **IT IS HEREBY ORDERED** that:

1. Arctic Cat's Motions to Exclude Bombardier's Damages and Certain Other Confidential Expert Testimony [Docket No. 656] is **DENIED**.

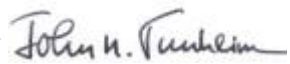
2. Arctic Cat's Motions to Exclude Dr. Christine Raasch and Certain Testimony of Robert Larson and Kevin Breen [Docket No. 685] is **DENIED**.

3. Bombardier's Motion to Exclude Arctic Cat's Expert Opinions [Docket No. 667] is **DENIED in part** and **GRANTED in part**, as follows:

a. The motion is **GRANTED** with regard to Karpik's opinions that are inconsistent with the Court's claim construction order, as described above.

b. The motion is **DENIED** in all other respects.

DATED: February 24, 2017
at Minneapolis, Minnesota.

s/ 

JOHN R. TUNHEIM
Chief Judge
United States District Court